CLAIMS:

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1. Joint use of a lighting means comprising at least one light-emitting source (21, 33) of a polychromatic white light (15) with high radiant energy (15-1) in the violet/blue wavelengths band, and with low residual energy in the red wavelengths band, and of a light intensifier night vision system (1).

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2. Use according to claim 1, characterized in that the polychromatic white light (15) furthermore has high radiant energy in the green/yellow and/or orange wavelengths bands, with low residual energy in the red wavelengths band.

3. Use according to claims 1 or 2, characterized in that the white light-emitting source has an emission spectrum (15) comprising a dominant (15-1) in the violet/blue wavelengths band and a dominant (15-2) in the green/yellow wavelengths band.

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4. Use according to one of the claims 1 to 3, characterized in that the white light-emitting source (15) has a bichromatic-dominant (15-1, 15-2) emission spectrum (15) with a violet/blue chrominance peak and a very wide range of chrominance from the green to the orange.

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5. Use according to one of the claims 1 to 4, characterized in that the white light-emitting source has an emission spectrum (15) with a main peak wavelength (15-1) of less than 492 nanometers, the main peak being a narrow, high-intensity peak, and a secondary peak wavelength (15-2) ranging from 492 to 622 nanometers, the secondary peak being a wide, medium-intensity peak, with very low residual intensity at wavelengths of over 622 nanometers.

6. Use according to one of the claims 1 to 5, characterized in that the white light-emitting source gives direct lighting.

7. Use according to one of the claims 1 to 6, characterized in that the white light-emitting source gives ambient lighting or indirect lighting.

8. Use according to one of the claims 1 to 7, characterized in that the white light-emitting source gives lighting without filtering in the red wavelengths band.

9. Use according to one of the claims 1 to 8, characterized in that the light-emitting source of white light gives lighting guided in a translucent board of the instruments panel.

10. Use according to one of the claims 1 to 9, characterized in that the light source is a white light-emitting diode (21, 33).

11. Use according to claim 11 to form a colored indicator, especially a green, yellow or red indicator, characterized in that the light-emitting diode is covered with a colored hood that is not filtered in the red wavelengths band.

12. Use according to claim 10 or 11, especially to form position indicators, landing lights, anti-collision lights or flight training lights in an aircraft, characterized in that the polychromatic white light source comprises a plurality of white light-emitting diodes (33) arranged on a printed circuit (34).

13. Use according to one of the claims 10 to 12, characterized in that the white light-emitting diode (21, 33) or the printed circuit (34) is fixedly joined to a screw-in or bayonet type socket (32).

14. Use according to one of the claims 1 to 9, especially to illuminate a cockpit or an instruments

panel, characterized in that the light source comprises a ramp of white light-emitting diodes.

15. Use according to one of the claims 1 to 9, especially to illuminate a cockpit or an instruments panel, characterized in that the light source comprises a white light-emitting panel.

16. Method to illuminate an aircraft instrument panel or an element capable of coming into a pilot's field of vision, without disturbing a light intensifier night vision imaging system (1), characterized in that it comprises a step consisting in the use of at least one light-emitting source (21, 33) of a polychromatic white light (15) with high radiant energy (15-1) in the violet/blue wavelengths band, and with low residual energy in the red wavelengths band.

17. Method according to claim 16, characterized in that the polychromatic white light (15) furthermore has high radiant energy in the green/yellow and/or orange wavelengths bands with low residual energy in the red wavelengths band.

18. Method according to claim 16 or 17, characterized in that the white light-emitting source has an emission spectrum (15) comprising a dominant (15-1) in the violet/blue wavelengths band and a dominant (15-2) in the green/yellow wavelengths band.

19. Method according to one of the claims 16 to 18, characterized in that the white light-emitting source has a bichromatic-dominant (15-1, 15-2) emission spectrum (15) with a violet/blue chrominance peak and a very wide range of chrominance from the green to the orange.

20. Method according to one of the claims 16 to 19, characterized in that the white light-emitting source has an emission spectrum (15) with a main peak wavelength (15-1) of less than 492 nanometers, the main peak being a narrow, high-intensity peak, and a secondary peak

wavelength (15-2) ranging from 492 to 622 nanometers, the secondary peak being a wide, medium-intensity peak, with very low residual intensity at wavelengths of over 622 nanometers.

21. Method according to one of the claims 16 to 20, characterized in that the white light-emitting source gives direct lighting.

22. Method according to one of the claims 16 to 21, characterized in that the white light-emitting source gives ambient lighting or indirect lighting.

23. Method according to one of the claims 16 to 22, characterized in that the white light-emitting source gives lighting without filtering in the red wavelengths band.

24. Method according to one of the claims 16 to 23, characterized in that the light-emitting source of white light gives lighting guided in a translucent board of the instruments panel.

25. Method according to claim 25, characterized in that the light source is a white light-emitting diode (21, 33).

26. Method according to claim 25 to form a colored indicator, especially a green, yellow or red indicator, characterized in that the light-emitting diode is covered with a colored hood that is not filtered in the red wavelengths band.

27. Method according to claim 25 or 26, especially to form position indicators, landing lights, anti-collision lights or flight training lights in an aircraft, characterized in that the polychromatic white light source comprises a plurality of white light-emitting diodes (33) arranged on a printed circuit (34).

28. Method according to one of the claims 25 to 27, characterized in that the white light-emitting diode (21,

33) or the printed circuit (34) is fixedly joined to a screw-in or bayonet type socket (32).

29. Method according to one of the claims 16 to 24, especially to illuminate a cockpit or an instruments panel, characterized in that the light source comprises a ramp of white light-emitting diodes.

30. Method according to one of the claims 16 to 24, especially to illuminate a cockpit or an instruments panel, characterized in that the light source comprises a white light-emitting panel.

31. Method for retrofitting an aircraft lighting system comprising incandescent lamps (20) to a light intensifier night vision system characterized in that the operation consists in replacing at least a part of the incandescent lamps by light-emitting diodes (21, 33) emitting a polychromatic white light (15) with high radiant energy in the violet/blue wavelengths band and low residual energy in the red wavelengths band.

32. Method according to claim 31, characterized in that the polychromatic white light (15) furthermore has high radiant energy in the green/yellow and/or orange wavelengths bands with low residual energy in the red wavelengths band.

33. Method according to claims 31 or 32, characterized in that there is no filtering done, in the red wavelengths band, of the light emitted by the white light-emitting diodes.

34. Method to retrofit a system of position lights, landing lights, anti-collision lights or flight training lights comprising incandescent lamps to a light intensifier night vision imaging system, characterized in that it comprises the operation consisting in replacing each incandescent lamp by a plurality of light-emitting diodes (33) emitting a polychromatic white light (15)

with high radiant energy in the violet/blue wavelengths band and low residual energy in the red wavelengths band.

35. Method according to claim 34, characterized in that the polychromatic light (15) furthermore has high radiant energy in the green/yellow wavelengths band and/or the orange wavelengths band with low residual energy in the red wavelengths band.

36. Method according to claim 34 or 35, characterized in that the light emitted by the white light-emitting diodes is not filtered in the red wavelengths band.

37. Lighting means (30) for aircraft lights, compatible with a light intensifier night vision imaging system (1), especially for position lights, landing lights, anti-collision lights or flight training lights characterized in that it comprises a plurality of white light-emitting diodes (33) arranged on a printed circuit (34), emitting a polychromatic white light (15) with high radiant energy (15-1) in the violet/blue wavelengths band and low residual energy in the red wavelengths band.

38. Lighting means according to claim 37, characterized in that the white light-emitting diode (21, 33) or the printed circuit (34) is fixedly joined to a screw-in or bayonet type socket (32).

39. Lighting means according to one of the claims 37 and 38, characterized in that the polychromatic white light (15) furthermore has high radiant energy in the green/yellow and/or orange wavelengths bands with low residual energy in the red wavelengths band.

40. Lighting means according to one of the claims 37 and 38, characterized in that the polychromatic white light (15) has an emission spectrum (15) comprising a dominant (15-1) in the violet/blue wavelengths band and a dominant (15-2) in the green/yellow wavelengths band.

41. Lighting means (30) for aircraft cockpit or

instruments panel, compatible with a light intensifier night vision imaging system (1), characterized in that it comprises a ramp of white light-emitting diodes emitting a polychromatic white light (15) with high radiant energy (15-1) in the violet/blue wavelengths band and low residual energy in the red wavelengths band.

42. Lighting means according to claim 41, characterized in that the polychromatic white light (15) furthermore has high radiant energy in the green/yellow and/or orange wavelengths bands with low residual energy in the red wavelengths band.

43. Lighting means according to one of the claims 41 and 42, characterized in that the polychromatic white light (15) has an emission spectrum (15) comprising a dominant (15-1) in the violet/blue wavelengths band and a dominant (15-2) in the green/yellow wavelengths band.

44. Lighting system comprising means of lighting in the visible range, means of lighting in the infrared range and switching means to make a choice between a lighting position in the visible range and a lighting position in the infrared range, characterized in that the means of lighting in the visible range include at least one light-emitting diode emitting a polychromatic white light with high radiant energy in the violet/blue wavelengths band and low residual energy in the red wavelengths band.

45. Lighting system according to claim 44, characterized in that the polychromatic white light (15) furthermore has high radiant energy in the green/yellow and/or orange wavelengths bands with low residual energy in the red wavelengths band.

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